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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,822	10/03/2005	Subhash Shivshankar Mhatre	J2069(C)	3930
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EXAMINER DOUYON, LORNA M				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/551,822

Applicant(s)

MHATRE ET AL.

Examiner

Lorna M. Douyon

Art Unit

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

1. This action is responsive to the amendment filed on November 14, 2008.
2. Claims 1-13 are pending.
3. The rejection of claims 8-10 under 35 U.S.C. 112, second paragraph is withdrawn in view of Applicants' amendment.
4. The rejection of claims 1, 11 and 12 under 35 U.S.C. 102(b) as being anticipated by Lundberg et al. (US Patent No. 2,987,484) is withdrawn in view of Applicants' amendment.
5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
6. Claims 1-3, 5, 7, 11, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lundberg et al. (US Patent No. 2,987,484), hereinafter "Lundberg".

Lundberg teaches a process for closed die molding a substantially non-soap synthetic detergent composition in the form of a toilet bar (see col. 1, lines 10-13) in which air or other gases are dispersed in the fluid detergent composition thereby resulting in a bar which will float in water (see col. 1, lines 26-29). The closed die molding process involves the rapid injection through a comparatively small orifice of a basically non-soap fluid mixture of synthetic detergent and a binder-vehicle, capable of

Art Unit: 1796

rapid solidification to a shape sustaining form, into a substantially closed precooled mold, and after solidification to at least a shape-sustaining form, the bar is ejected from the mold for further cooling as necessary (see col. 3, lines 32-44). In Example 13, Lundberg teaches the preparation of a synthetic bar which comprises 55 parts sodium alkyl glyceryl ether sulfonate, 10 parts stearyl alcohol (the vehicle) (see Table under cols. 17-18). In Example 1, Lundberg teaches the process steps which include heating in a crutcher the synthetic detergent and fatty alcohol vehicle, agitating for about 20 minutes, then nitrogen gas is dispersed and emulsified in the melt, a portion of the melt is injected in the mold which was cooled to 0°F, and after about 2.5 minutes the bar was ejected from the mold (see col. 14, lines 10-55). In addition, Lundberg teaches that vehicle modifiers such as propylene glycol can be added to the melt in the range from 0% to about 8% (see col. 9, lines 31-55). Fillers can also be used in the bar compositions in amounts up to about 30% (see col. 13, lines 28-30), and one example is polyethylene glycols with molecular weights of 4,000 to 20,000 (see col. 13, lines 43-44). Water-soluble, normally solid, higher fatty acid soaps can be included in the bar composition in amounts up to about 15% to give the user of the finished bar an impression of "soap-feel" to which he may be accustomed (see col. 13, lines 8-21). Lundberg, however, fails to disclose (1) the addition of the fatty alcohol after the air has been incorporated into the melt (2) that the detergent active comprises soap; (3) the presence of polyhydric alcohol like propylene glycol and polyethylene glycol in amounts as those recited; and (4) the amount of fatty alcohol in the range from 1% to 9% by weight.

With respect to difference (1), even though Lundberg does not disclose the addition of the fatty alcohol after the air has been incorporated into the melt, rather the fatty alcohol is incorporated into the melt before the air has been added, it would have been obvious to one of ordinary skill in the art at the time the invention was made to change the order of adding the fatty alcohol into the melt, because changing the order of steps does not render a claimed process non-obvious over the prior art, see *Ex parte Rubin*, 128 USPQ 440,441,442 (POBA 1959).

With respect to difference (2), it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate soap in its optimum proportion into the bar composition because this would give the user of the finished bar an impression of "soap-feel" to which he may be accustomed as taught by Lundberg in col. 13, lines 8-21.

With respect to difference (3), it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate propylene glycol and polyethylene glycol in their optimum proportions because the teachings of Lundberg encompass these ingredients and proportions thereof to provide the desired characteristics of the bar composition.

With respect to difference (4), a *prima facie* case of obviousness exists where the claimed ranges and prior art ranges do not overlap (i.e., 10% stearyl alcohol from Example 13 of Lundberg vs. 9% of instant claim 5) but are close enough that one skilled in the art would have expected them to have the same properties, see *Titanium Metals*

Corp. of America v. Banner, 778F.2d 775,227 USPQ 773 (Fed. Cir. 1985). See MPEP 2144.05 I.

7. Claims 1-5, 7-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taneri et al. (US Patent No. 5,194,172), hereinafter "Taneri".

Taneri teaches a process for making aerated freezer bars which comprises the following steps: I. Mixing a soap composition comprising: (60) (A) from about 25 wt. % to about 70 wt. % of alkali metal fatty acid soap in which said fatty acids contain from about 8 to about 18 carbon atoms; (B) from about 5% to about 35% of sucrose; (C) from 0 wt. % to about 30 wt. % of hydrophobic material selected from waxes and free fatty acids, mono-, di-, and triglycerides; and fatty alcohols containing from about 8 to about 18 carbon atoms; and mixtures thereof; and (D) from about 10% to about 30%, preferably from about 15% or 20% to about 25%, water; wherein said composition has a mixing temperature of from about 82°C. to about 102 °C; II. Aerating said mix; III. Cooling the mix to a temperature of from about 49 °C. to about 66 °C; and IV. Forming aerated bars (plugs) from said cooled and aerated mix (see col. 7, lines 1-34). Although freezer bars are preferred, aerated bars of the present invention can also be made using a cast (frame) bars process (see col. 7, lines 57-59). The term "sucrose" includes similar polyols like sorbitol (see col. 3, lines 17-22). The soaps are made in situ (see col. 8, line 29). The bar composition can additionally contain a water-soluble organic nonsoap synthetic detergent, preferably, at a level of from about 2% to about 15% by weight of the bar (see col. 6, lines 14-17). Taneri, however, fails to specifically disclose

a process for making an aerated bar soap using the cast process, and the addition of the fatty alcohol after the air has been incorporated into the melt

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have prepared the aerated bar soap using the cast process because Taneri teaches that aerated bars can also be made using a cast process as disclosed in col. 7, lines 57-59.

With respect to the addition of the fatty alcohol after the air has been incorporated into the melt, even though Taneri does not disclose the addition of the fatty alcohol after the air has been incorporated into the melt, rather the fatty alcohol is incorporated into the melt before the air has been added, it would have been obvious to one of ordinary skill in the art at the time the invention was made to change the order of adding the fatty alcohol into the melt, because changing the order of steps does not render a claimed process non-obvious over the prior art, see *Ex parte Rubin*, 128 USPQ 440,441,442 (POBA 1959).

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Taneri as applied to the above claims, and further in view of Moroney et al. (US Patent No. 5,264,144), hereinafter "Moroney".

Taneri teaches the features as described above. In addition, Taneri teaches that in cast bars, higher levels of water and/or organic solvent, e.g., 40% water are used (see col. 8, lines 5-7). Taneri, however, fails to disclose the incorporation of a mixture of

Art Unit: 1796

polyethylene glycol with a molecular weight of between 200 and 1500, propylene glycol and sorbitol.

Moroney, an analogous art, teaches the incorporation of 1.0-50 wt% of water-soluble organics (see col. 13, lines 34-40), such as propylene glycol, polyethylene glycols of up to about 8,000 molecular weight and sorbitol to stabilize the appearance of the aerated bar soaps (see col. 15, lines 15-29).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate propylene glycol, polyethylene glycols of up to about 8,000 molecular weight and sorbitol in their optimum proportions into the aerated bar of Taneri because Taneri specifically desires additional solvent in the cast process, and Moroney teaches such solvents to stabilize the appearance of the aerated bar soaps.

9. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lundberg as applied to the above claims, and further in view of Moroney.

Lundberg teaches the features as described above. Lundberg, however, fails to disclose the incorporation of a mixture of polyethylene glycol with a molecular weight of between 200 and 1500, propylene glycol and sorbitol.

Moroney, an analogous art, teaches the incorporation of 1.0-50 wt% of water-soluble organics (see col. 13, lines 34-40), such as propylene glycol, polyethylene glycols of up to about 8,000 molecular weight and sorbitol to stabilize the appearance of the aerated bar soaps (see col. 15, lines 15-29).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate propylene glycol, polyethylene glycols of up to about 8,000 molecular weight and sorbitol in their optimum proportions into the aerated bar of Lundberg because such addition would stabilize the appearance of the aerated bar soaps as taught by Moroney.

Response to Arguments

10. Applicants' arguments filed November 18, 2008 have been fully considered but they are not persuasive.

With respect to the obviousness rejection based upon Taneri, as they apply to the present amended claims, Applicants argue that Lundberg does not contemplate adding the fatty alcohol after the aeration step has taken place. Applicants also argue that assuming *arguendo* a proper *prima facie* case had been set out under §103(a), applicants assert that the unexpected results disclosed in the instant application with respect to fatty alcohols stabilizing the entrained air in the toilet bar as shown for examples prepared when the claimed level of fatty acid was added after aeration of the bar (see Tables 2 to 4 and specification page 12, lines 19-20) are sufficient to rebut such a *prima facie* case.

The Examiner respectfully disagrees with the above argument because, as stated in paragraph 6 above, even though Lundberg does not disclose the addition of the fatty alcohol after the air has been incorporated into the melt, rather the fatty alcohol is incorporated into the melt before the air has been added, it would have been obvious

to one of ordinary skill in the art at the time the invention was made to change the order of adding the fatty alcohol into the melt, because changing the order of steps does not render a claimed process non-obvious over the prior art, see *Ex parte Rubin*, 128 USPQ 440,441,442 (POBA 1959).

The showing on pages 12-17 of the specification has been carefully considered, however, the showing is not compared with the close prior art of record, and there is seen no criticality as to the addition of fatty alcohol after aeration. The examples on page 14 of the specification fail to compare the addition of the cetyl alcohol before aeration, as disclosed by Lundberg, the close prior art of record, to make a meaningful comparison on the criticality of the order of steps of the fatty alcohol before or after aeration. In Example IV on pages 16-17 of the specification, the effect of the sequence of addition of the cetyl alcohol and the incorporation of air was shown, and it was stated that in separate experiments, cetyl alcohol was added before aeration and after aeration, and in both cases the aeration was good and the bars had uniform distribution of the air bubbles, and that the physical and in use properties were also comparable. As evident from this showing, there is seen no criticality as to the order of steps of the addition of the cetyl alcohol and the incorporation of air. In addition, Example 5 in Table 3 on page 15 shows that the addition of 10 wt% cetyl alcohol resulted in a melt which is not pourable, hence, the "10 wt%" in the present claim 1 is not commensurate in scope with the showing.

With respect to the obviousness rejection based upon Taneri, Applicants argue that Taneri does not disclose or suggest the process of the present invention whereby

Art Unit: 1796

the fatty acid component is added to the soap melt after the aeration of the soap melt mix.

The Examiner respectfully disagrees with the above argument because, first of all, presumably, Applicants' argument above refers to fatty alcohol being added to the soap melt after the aeration of the soap melt mix. Secondly, as stated in paragraph 7 above, even though Taneri does not disclose the addition of the fatty alcohol after the air has been incorporated into the melt, rather the fatty alcohol is incorporated into the melt before the air has been added, it would have been obvious to one of ordinary skill in the art at the time the invention was made to change the order of adding the fatty alcohol into the melt, because changing the order of steps does not render a claimed process non-obvious over the prior art, see *Ex parte Rubin*, 128 USPQ 440,441,442 (POBA 1959).

With respect to the obviousness rejection of claim 6 based upon Lundberg **or** Taneri, in view of Moroney, Applicants argue that Moroney does not remedy the deficiencies of either Lundberg or Taneri with respect to setting forth a proper prima facie case under § 103(a) for claim 6 which depends from claim 1, because Moroney is not directed toward an aerated bar of soap as claimed in the present invention.

The above responses to Lundberg and Taneri apply here as well. Hence, the obviousness rejection of claim 6 based upon Lundberg **or** Taneri, in view of Moroney is proper and is maintained.

Conclusion

11. Applicants' amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lorna M. Douyon whose telephone number is 571-272-1313. The examiner can normally be reached on Mondays-Fridays 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lorna M Douyon/
Primary Examiner, Art Unit 1796